A Portal into Oracle® Portal

By Steve Callan

One definition of portal (from www.m-w.com) is “a communicating part or area of an organism; specifically: the point at which something (as a pathogen) enters the body.” Oracle’s definition of portal is “a collection of Web pages, applications, and other content linked to one another, whose organization facilitates managing, accessing, and interacting with information on the Web. The pages provide a single entry point that enables users to view information from a variety of sources.” In the context of the dictionary definition, the organism supporting access to the Web for Oracle Portal is Oracle Application Server (OracleAS), and the pages serve as points where “something” (hopefully no pathogens!) enters your browser.

The purpose of this article is to present, well, a portal into Oracle Portal. In this case, the portal context is that of serving as an “approach or entrance to a bridge.” Oracle Portal can serve as a bridge between your users, your company, and the Internet.

Editor’s Note: Our cover story features Steve Callan, ORAtips Database Associate Editor. Steve drills deep into Fusion Middleware and Application Server technologies to explain where Oracle Portal fits in, and articulates prerequisites for hardware, software, resource, and licensing, as well as a checklist of tips to keep in mind. He provides, at a high level, “how-to” information and speaks to portal alternatives.

Introduction

Oracle Portal can serve as a bridge between your users, your company, and the Internet.

Where Does Portal Fit into the Picture?
Before going any further, it may help to explain where Portal fits in the big scheme of things, and before that can take place, we’ll need a roadmap for what is now known as Oracle Fusion Middleware. If “Fusion Middleware” as a product or family name seems to have suddenly appeared on your radar, it is because that is exactly what it did, to wit: one day there wasn’t Oracle Fusion Middleware, and the next day there was. Fusion Middleware is the umbrella-like “portfolio of leading, standards-based and customer-proven software products that spans a range of tools and services from J2EE and developer tools, to integration services, business intelligence, collaboration, and content management.”

Oracle Portal falls under the Fusion Middleware family tree (Figure 1), but its installation and use is dependent upon one of three versions of OracleAS. The Java (either of J2EE or OC4J) and Forms & Reports Services standalone versions do not support Portal.
The base version of OracleAS used for examples in this article is Oracle Application Server 10g Release 2 (10.1.2) Standard Edition One. Although other versions support Portal (as illustrated in Figure 1), the point of an example or demonstration is diluted when too much time has to be spent on the overhead and setup. For example, to see what Portal offers, only one installation process is required, and nothing has to be done with respect to some of the more advanced features of OracleAS. Further, what you will see here can be accomplished on a desktop (or laptop) computer. All of the Portal examples (Oracle by Example series) at Oracle Technology Network (OTN) assume you have already successfully installed one version or another of OracleAS.

Have you seen a portal in action without fully realizing the presence of one? Chances are very good that you have, and the idea of an easily customizable dashboard or browser interface is exactly what Amazon, Google, your bank, and a myriad of other sites typically offer you. Figure 2 illustrates what Google allows you to do on a customized home page.

Technically, one can argue that presenting links to other sites isn’t really a portal, but that goes back to what is meant by portal. When a “bridge” is shown to you, does it matter if you stay on the same page when crossing it? A more sophisticated portal page (operating with portlets) is based on the portal you enter as being a subset of the page you start from. In other words, it is a lot like the picture-in-picture (PIP) feature available on many television sets. The main or parent channel stays constant, but the portal or PIP page is readily changeable. If you are convinced that Figure 2 is not a true portal, then what do the “edit” and “X” links represent for each of the sites shown in Figure 2? Those are directly related to your being able to customize what you see on the page.

Oracle Portal is a lot like the picture-in-picture (PIP) feature available on many television sets.

Getting OracleAS Standard Edition One

As mentioned, OracleAS SE1 (not to be confused with the RDBMS SE1) is one of the three versions of OracleAS needed to run Portal. Getting to the correct download page at OTN is somewhat of a chore in and of itself, but you will know you are at the correct page if the only versions available are Windows and Linux. Expand the included contents and about halfway down the list, Oracle Portal is readily seen in Figure 3.

Installing OracleAS SE1

Two things to note if trying this at home (which is why this is a demo): Windows XP is not certified for the Portal option (it is certified for J2EE and Web Cache), and you need at least 1GB of RAM. “Not certified” does not mean it won’t install or run, but don’t count on any...
support. The installation is fairly straightforward, and given that I already have a 10g database installed, I will take advantage of that and use it as the repository (see Figure 4). Otherwise, fill in the fields as necessary.

On the “Select a Product to Install” screen, be sure to select the Oracle Portal radio button. The rest of the windows are self-explanatory. Twenty configuration assistants run and many are similar to the configuration assistants seen when installing the RDBMS software. Ideally, all should reflect a status of succeeded. The next phase is the Portal installation (same installation session, but runs through the installation and assistants portions again). After the 15 configuration assistants finish running, take note of the ports. The URL/port information can also be found under the OracleAS ORACLE_HOME\install folder.

As a test of the installation on my computer, I can check one of the two URLs shown in the End of Installation window. The first one I will try is the page at port 80.

On the right side of the page, the login frame provides quick links to Application Server control, Portal, and SSO. The login name for Portal is portal, and the password is whatever you set/indicated previously. Let’s go to the Portal!
After logging in, you will see the generic Instant Portal page.

One of the amazing features behind Portal is the combination of simplicity and speed with which you can start customizing the content and LAF (look and feel). In less than one minute, you can turn the default page (Figure 7) into a page similar to what is shown in Figure 8.

Where to Get Help and More Information About Portal

As it does with virtually all of its products, Oracle provides a one-stop information site for Portal at Oracle Portal Center (www.oracle.com/technology/products/ias/portal/index.html). The Oracle Instant Portal link page (change "index" to "instant" in the last URL) offers several short viewlets on how to setup and configure Portal. A troubleshooting guide is available on MetaLink, and if you have access to MetaLink, it is worthwhile reading about some of the common problems. If you do not have access, here is a tip that will prevent some frustration in trying to configure the Favorite Content portlet: the portlet only accepts text and file items (no URLs, images, or email addresses).

Oracle Portal has an additional licensing fee of $0 above and beyond what you’re already paying for Application Server.

Alternatives to Portal

Several other major vendors offer their own viable and quite respectable portal solutions, but to borrow what Microsoft always uses in its promotional literature, you have to consider the TCO (total cost of ownership). Oracle Portal has an additional licensing fee of $0 above and beyond what you’re already paying for Application Server. Implementation of Instant Portal is almost immediate once installation is complete.
Organizations can leverage what they already know regarding Web server administration as it relates to Application Server. Security via SSO, and database authentication is intrinsic to the product.

Another major TCO factor is related to development. If your organization already employs J2EE-based applications, the same technology and set of developer skills that went into those applications are immediately transferable to Portal. This cost component is probably by far the greatest, so why not leverage the skills and resources you already have?

What skills were required to install Portal? Answer: Familiarity with the RDBMS or Application Server software installation process. That’s it, plain and simple. Even on an uncertified operating system version (I used Windows XP SP2 on an IBM ThinkPad with 1GB of RAM), the installation process was smooth, start to finish. This is without doubt something you can try at home in one evening (or even on a flight from Denver to Atlanta). Give it a try and open your own portal into Portal.

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Implementation of Instant Portal is almost immediate once installation is complete.

In Closing
This article was not expressly meant to be a step-by-step installation guide for Oracle Portal, but covering some of the details and requirements was instructive in that sometimes you need to see that little bit extra not mentioned in installation guides to get you past the hesitation of trying things on your own.